changed the margins in cases where the sequence text was "wrapped" down to the next line. Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the pplicant was the prior application data; or other, other, other, other, other, or, or	C	CRF Express Corrected by the STIC System Branch Processing Date: 1/29/20 hanged a file from non-ASCII to ASCII TO THE Processing Date: 1/29/20 (STIC st
idited the Current Application Data section with the actual current number. The number inputted by the pplicant was		
pplicant was	Ε¢	dited a format error in the Current Application Data section, specifically:
idited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. It is applied the spelling of a mandatory field (the headings or subheadings), specifically: orrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: presented or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: orrected subheading placement. All responses must be on the same line as each subheading. If the oplicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: Deleted: In non-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of file page numbers throughout text; other invalid text, such as orrected an obvious error in the response, specifically: corrected an obvious error in the response, specifically: dided identifiers where upper case is used but lower case is required, or vice versa. Forrected an error in the Number of Sequences field, specifically: "Hard Paga Break" code was inserted by the applicant. All occurrences had to be deleted. Reted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error		
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leted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error) _	prrected an error in the Number of Sequences field, specifically:
	١.	'Hard Page Break' code was inserted by the applicant. All occurrences had to be deleted.
		eted <i>endIng</i> stop codon in amino acid sequences and adjusted the *(A)Length:* field accordingly (error to a PatentIn bug). Sequences corrected:

*Examiner: The above corrections must be communicated to the applicant in the first Offic Action. DO NOT send a copy of this form.



PCT10

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             William Gaarde
             Lex M. Cowsert
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     11 <130> FILE REFERENCE: RTSP-0265
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C--> 13 <141> CURRENT FILING DATE: 2001-12-26
     13 <150> PRIOR APPLICATION NUMBER: 09/359,757
     14 <151> PRIOR FILING DATE: 1999-07-23
     16 <160> NUMBER OF SEQ ID NOS: 47
     18 <210> SEQ ID NO: 1
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    39 gggcagcggc gtgccctcgg gggagagggc gccggataag agcggcggcg cggcggcgat
                                                                            240
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                                                                            300
    43 ctggccaggc ggtgcggctg ggcgggggac gccgccgccg ttgctgcccg gcccggaqag
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    45 atg agc acg gag gcg gac gaa ggc atc act ttc tct gtg cca ccc ttc
                                                                            408
    46 Met Ser Thr Glu Ala Asp Glu Gly Ile Thr Phe Ser Val Pro Pro Phe
    47 1
    49 gcc ccc tcg ggc ttc tgc acc atc ccc gag ggc ggc atc tgc agg agg
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    50 Ala Pro Ser Gly Phe Cys Thr Ile Pro Glu Gly Gly Ile Cys Arg Arg
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                                        25
    53 gga gga gcg gcg gtg ggc gag ggc gag gag cac cag ctg cca ccg
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    54 Gly Gly Ala Ala Ala Val Gly Glu Gly Glu His Gln Leu Pro Pro
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    57 ccg ccg ccg ggc agc ttc tgg aac gtg gag agc gcc gct gcc cct ggc
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    58 Pro Pro Pro Gly Ser Phe Trp Asn Val Glu Ser Ala Ala Ala Pro Gly
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                                55
    61 atc ggt tgt ccg gcg gcc acc tcc tcg agc agt gcc acc cga ggc cgg
                                                                            600
    62 Ile Gly Cys Pro Ala Ala Thr Ser Ser Ser Ala Thr Arg Gly Arg
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PATENT APPLICATION: US/10/019,595 TIME: 19:46:16

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W>					120					125					130	_4		700
				cat														792
		Thr	ren	His	Pue	GTĀ	ràs	rea	140	Pne	GTÀ	GTa	THE	145	vaı	rea	ASP	
M>		~~~	+++	135	~ ~ +	~~~	~~+	-++			α÷σ	a 2 a	a t o		rat	aaa	tta	840
				tac Tyr														040
W>		AIG	150	1 Y 1	ASII	ALG	msp	155	Ald	Val	VUL	GLU	160	561	nsp	niu	1110	
W>		caa		ccg	tee	tta	+++		cac	ctt	aaa	at.a		gaa	agt.	t.t.c	age	888
				Pro														• • •
W>		_	0		501		170	-1-			4	175	5				180	
** *			acc	aac	aac	atc		ctc	tac	tat	gat	act	aac	tcq	gac	tct	ctg	936
				Asn														
W>						185			-	-	190				195			
	93	cag	tca	ctg	aag	gaa	ata	att	tgc	cag	aag	aat	act	atg	tgc	act	ggg	984
	94	Gln	Ser	Leu	Lys	Glu	Ile	Ile	Cys	Gln	Lys	Asn	Thr	Met	Cys	Thr	Gly	
W>				200					205					210				
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	98	Asn	Tyr	Thr	Phe	Va1	Pro		Met	Ile	Thr	Pro		Asn	Lys	Val	Tyr	
M>			215					220					225					
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		_	_	s Asp	Ser	Ser			Lys	GT?	Leu			ı Let	ı Met	GI	Pro	
M>							235					240					245	1128
																	cgt Arg	1120
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W>			- att	- caa	ctt			at a	ı aca	caa		•	tet	- aσσ	c cac		ttc	1176
																	Phe	
W>					265					270					275		•	
			r qaa	a tct	ata	cto	aat	gad	ato	ago	, aaa	gct	. cgt	aat	: tta	tac	act	1224
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W>	115	;		280)			_	285	i	_			290)			
	117	' ggt	. aaa	a gaa	ı ttg	gca	gct	gag	, ttg	gca	aga	att	: cgg	cag	g cga	gta	ı gat	1272
																	l Asp	
M>			295					300			•		305					
																	tcc	1320
				e Glu	ı Val	. Leu			a Asp) Ile	e Val			ı Lev	ı Let	ı Let	Ser	
		305					310					315					320	
																	g act	1368
			Arg	y Asp) Ile			Туг	Asp	Sei			Lys	Let	ı val		Thr	
	127					325					330					335		1410
	129	tta	ı gaa	a aaa	ı ctg	cca	acc	ttt	gat	בנק	gcc	tco	: cat	cac	cat	gr	g aag	1416

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133	ttt	cat	tat	qca	ttt	qca	cta	aat	agg	aga	aat	ctc	cct	ggt	qac	aga	1464
	Phe																
135		****	355	1124	- 110	11,14	200	360	9				365	1	T.O.F	5	
																	1512
	gca																1312
138	Ala	Lys	Ala	Leu	Asp	Ile	Met	He	Pro	Met	Val	GIn	Ser	GLu	GLY	GIn	
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	Phe																
147	- 155			201	405	1110	4 114	шър		410	501		шР		415		
	+ - +	+~~	++-	222		~~~	+++	<i>a</i>	tat		000	202	ata	020		aas	1656
	tct																1030
	Ser	Trp	Pne		Lys	Ата	Pne	GIU		GIU	Pro	THE	Leu		ser	GTĀ	
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	att																1704
154	Ile	Asn	\mathtt{Tyr}	Ala	Val	Leu	Leu	Leu	Ala	Ala	Gly	His	Gln	Phe	Glu	Ser	
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	Ser																
159		450			,	*	455	-		**		460				_	
	aaa	_	σσα	aac	ttσ	αаа		ctc	саσ	аσс	tac	taa	σaa	at t	σσa	ttt	1800
	Lys																
163	_	пуэ	GTÄ	กรม	пси	470	цуз	Lea	GIII	JCI	475	115	O L U	141	011	480	
							+	~				a+ ~		a+ a	n++	_	1848
	ttt																1040
	Phe	Leu	GTĀ	Ala		Val	ren	Ala	Asn	-	HIS	Mer	Arg	var		GIII	
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	Thr																
	TIIT	530	GIII	110	Val	ALU	535	GIII	GIU	Deu	, ur	540	1110	111	1100		
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TRT	ttc	ctg	gre	gag	gcc	aca	aag	aca	gat	yıı.	act	gug	guu	ayy	26.	Don	2040
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	gta																2088
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	Ile																
191				580		- '		•	585				•	590			
	cct	gat	gac		aaa	aat	ata	cat		tσσ	aat	ttt	aσt	-	tet	tct	2184
	Pro																
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		Arg															
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		ctg		_	_		-	_				_	_				2300
227	P10	Leu	uis	GIU	725	TTG	WIG	rea	птр	730	nrs	ьeu	րչե	nıs	735	Mali	
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		CCC															2904
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		ata															2952
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															gga Gly		3048
267	FIIE	1 7 1	Giu	Leu	885	GIU	P10	9111	нта	890	met	Phe	nys	Val	895	mec	
	+++	ааа	atc	cac		σασ	atc	cca	σεσ		atα	tet	αca	σασ	gcc	aaq	3096
			-								_				Ala		2020
271		-1-		900					905					910			
273	gca	ttc	ata	ctg	aaa	tgt	ttt	gaa	cca	gat	cct	gac	aag	aga	gcc	tgt	3144
274	Ala	Phe	Ile	Leu	Lys	Cys	Phe	Glu	Pro	Asp	Pro	Asp	Lys	Arg	Ala	Cys	
275			915					920					925				
															aaa		3192
	Ala		Asp	Leu	Leu	Val		Glu	Phe	Leu	Lys		Ser	Ser	Lys	Lys	
279		930					935	_				940					2010
		-				-			-			-			aat		3240
	_	гÃ2	Thr	GTII	Pro	ьуs 950	ren	ser	Ald	Leu	955	Ald	СТА	ser	Asn	960	
283		ata	aaa	ant	ata		tta	aca	αta	aat		cta	ata	ກຣກ	gac		3288
															Asp		3200
287	-1-	Lou	**** 3	501	965	501	200			970	,	200			975		
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	_	-	_	-					_			-	_		Leu		
291				980					985					990			
															gaa		3384
	Val	Asp		Phe	Ser	Phe	Lys		-	Ala	Lys	Ser	_	. –	Glu	Arg	
295			995					1000					1005				2422
															gag		3432
298	ASP	1010		GTĀ	rre	Arg	1015		Pne	ren	GTĀ	1020		Asp	Glu	ASII	
_	+++			cac	aαt	act			tec	cct	паа			αat	tct	ααa	3480
		_	-		-	=					_	-		-	Ser	-	5.00
	1025					1030					1035		-1-			1040	
305	ttc	ttc	atg	ctg	agg	aag	gac	agt	gag	agg	cga	gct	acc	ctt	cac	agg	3528
306	Phe	Phe	Met	Leu	Arg	Lys	Asp	Ser	Glu	Arg	Arg	Ala	Thr	Leu	His	Arg	
307					1045					1050					1055		
															gaa		3576
	Ile	Leu	Thr			Gln	Asp	ГЛЗ			Arg	Asn	Leu		Glu	Ser	
311				1060					1065					1070			2624
															atc		3624
314	ren	Ala	1075		Ald	GIU	GIU	1080		ьец	гĀЗ	тгр	1085		Ile	THE	
	200	ctc			age	ctc	апа			ata	ana	tee			cga	aaa	3672
															Arg		3072
319	1.11	1090		.,_u	J U A	2-4	1095		1.10		9	1100			9	-,-	
	atc			acc	aca	ctq			ctq	aaa	ctq			gac	ttc	gac	3720
															Phe		
323	1105	;				1110)	_		-	1115	5				1120	
325	agc	cat	ggc	att	agc	caa	gtc	cag	gtg	gta	ctc	ttt	ggt	ttt	caa	gat	3768



The of a sold or Man has been detected in the Sequence Listing. The withe Sequence Listing to incure a corresponding expanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/019,595
DATE: 01/27/2002
TIME: 19:46:17

Input Set : A:\PTO.AMC.txt

```
L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:67 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:71 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:75 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:79 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:83 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:87 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:91 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:95 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:99 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:103 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:107 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:111 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:115 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:119 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
```



PCT10

RAW SEQUENCE LISTING

DATE: 01/22/2002

PATENT APPLICATION: US/10/019,595

TIME: 10:37:36

Input Set : A:\rtsp-265sequence.txt

Output Set: N:\CRF3\01182002\J019595.raw

Does Not Comply Corrected Diskette Needed

5 <110> APPLICANT: Brett P. Monia

William Gaarde 6

Lex M. Cowsert

9 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF MEKK5 EXPRESSION

11 <130> FILE REFERENCE: RTSP-0265

C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/019,595

C--> 13 <141> CURRENT FILING DATE: 2001-12-26

13 <150> PRIOR APPLICATION NUMBER: 09/359,757

14 <151> PRIOR FILING DATE: 1999-07-23

16 <160> NUMBER OF SEQ ID NOS: 47

ERRORED SEQUENCES

957 <210> SEQ ID NO: 47

958 <211> LENGTH: 20

959 <212> TYPE: DNA

960 <213> ORGANISM: Artificial Sequence

962 <220> FEATURE:

963 <223> OTHER INFORMATION: Antisense Oligonucleotide

965 <400> SEQUENCE: 47

966 gcacgatcac atgaatgtta
E--> 968/1

20

E--> 971(17)

VERIFICATION SUMMARY DATE: 01/22/2002 PATENT APPLICATION: US/10/019,595 TIME: 10:37:37

Input Set : A:\rtsp-265sequence.txt
Output Set: N:\CRF3\01182002\J019595.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:67 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:71 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:75 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:79 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:83 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:87 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:91 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:95 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:99 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:103 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:107 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:111 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:115 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:119 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:968 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:20 SEQ:47 M:254 Repeated in SeqNo=47